

Enhanced Delta Smelt Monitoring: PRELIMINARY Abundance Analysis

January 14, 2017

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Disclaimer:

This analysis is preliminary and the results are subject to correction and revision. The following points should be taken into consideration when interpreting the results:

1. Delta smelt caught in the wings of the net (as opposed to the live box or cod end) were excluded from this analysis. Fish caught in the wings are indicated by a Gear Condition Code of 9.
2. Abundance estimates labeled **Total** exclude any strata that were not sampled in a given week.
3. The **Week** designations used here were defined out of convenience and are subject to change.

Abundance estimates by week:

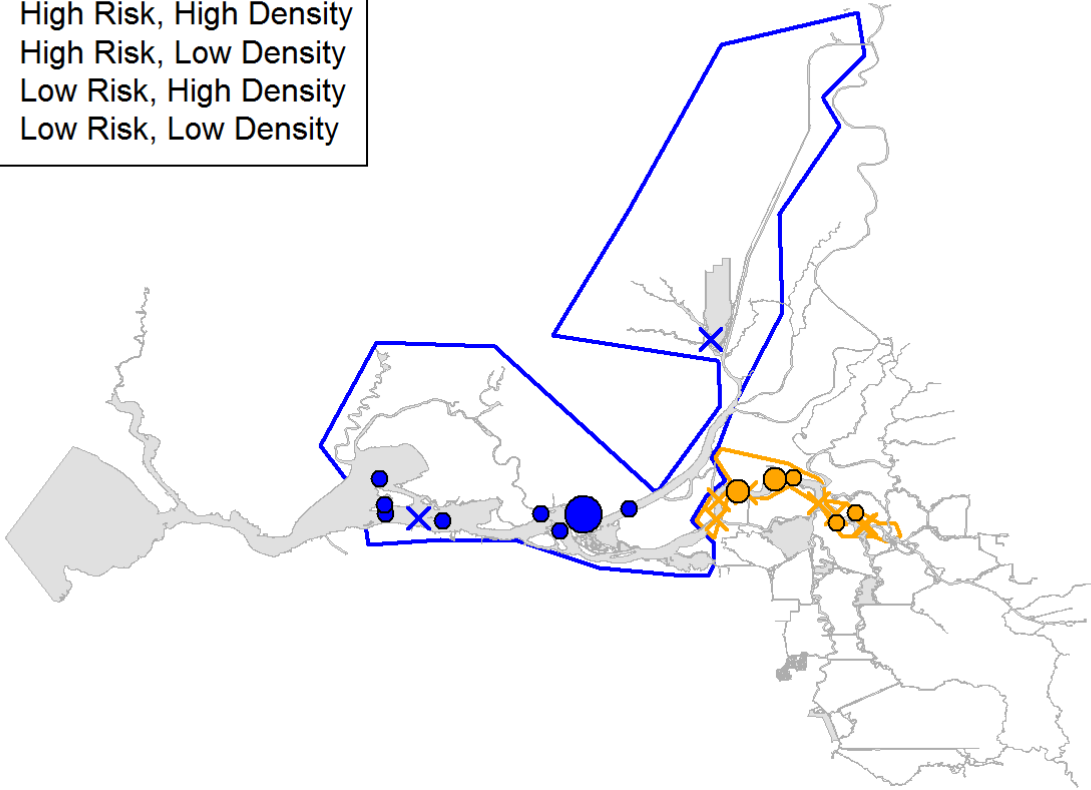
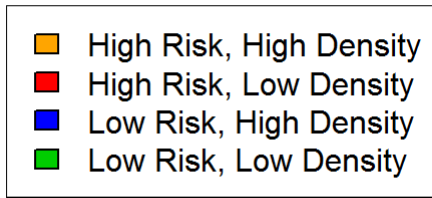
Week	Dates	Stratum	NumOfSites	Estimate and 95% CI		
				Abundance	Lower Bound	Upper Bound
1	Dec 15 - Dec 22	High Risk, High Density	12	3,607	1,691	6,786
		High Risk, Low Density	0	NA	NA	NA
		Low Risk, High Density	11	91,930	44,352	169,509
		Low Risk, Low Density	0	NA	NA	NA
		Total	23	95,537	47,376	172,771
2	Dec 27 - Dec 29	High Risk, High Density	10	11,241	5,402	20,783
		High Risk, Low Density	0	NA	NA	NA
		Low Risk, High Density	6	471,225	182,730	1,005,650
		Low Risk, Low Density	0	NA	NA	NA
		Total	16	482,465	191,247	1,015,259
3	Dec 30 - Jan 5	High Risk, High Density	15	24,349	13,618	40,322
		High Risk, Low Density	0	NA	NA	NA
		Low Risk, High Density	9	137,327	47,342	315,258
		Low Risk, Low Density	0	NA	NA	NA
		Total	24	161,676	65,134	336,679
4	Jan 6 - Jan 12	High Risk, High Density	11	2,495	938	5,432
		High Risk, Low Density	6	4,781	1,488	11,656
		Low Risk, High Density	3	173,097	49,742	441,655
		Low Risk, Low Density	0	NA	NA	NA
		Total	20	180,373	54,401	447,851

Proportion of delta smelt in high density areas that are also in high risk areas:

Week	Estimate and 95% CI		
	Proportion in HR	Lower Bound	Upper Bound
1	0.038	0.014	0.083
2	0.023	0.007	0.056
3	0.151	0.054	0.339

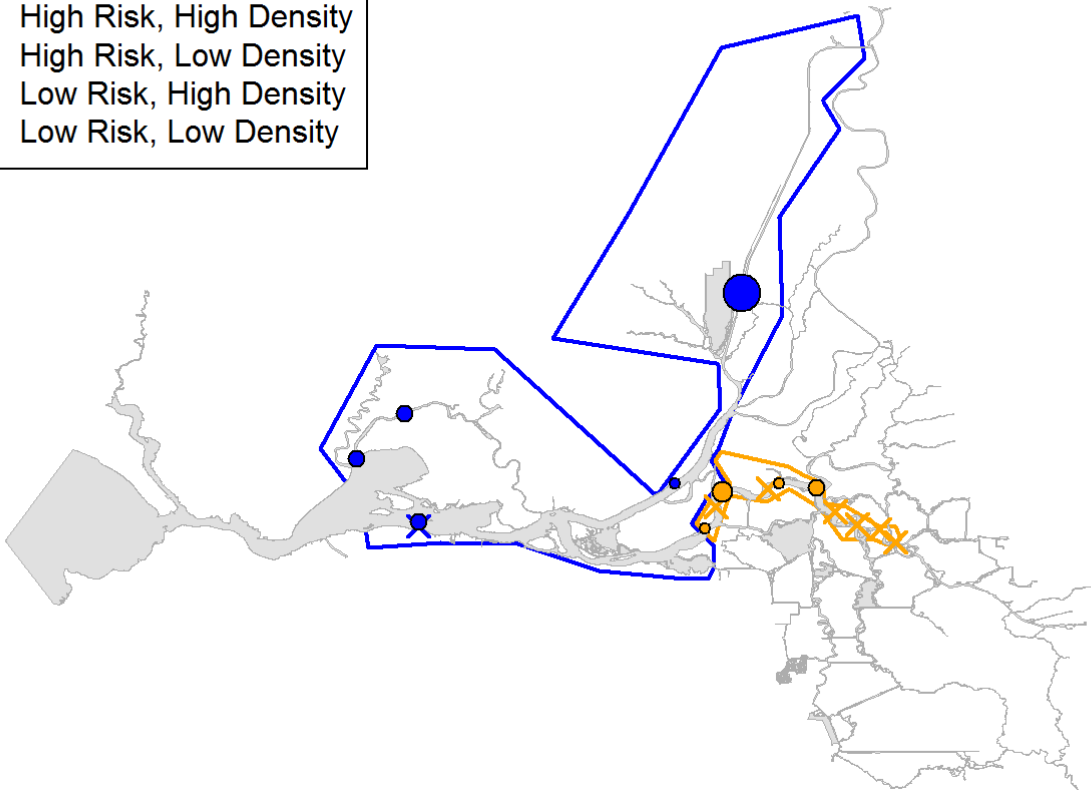
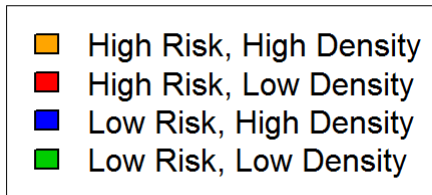
Week 1 DSM catches (X = no catch)

23 sites; 19 DSM total



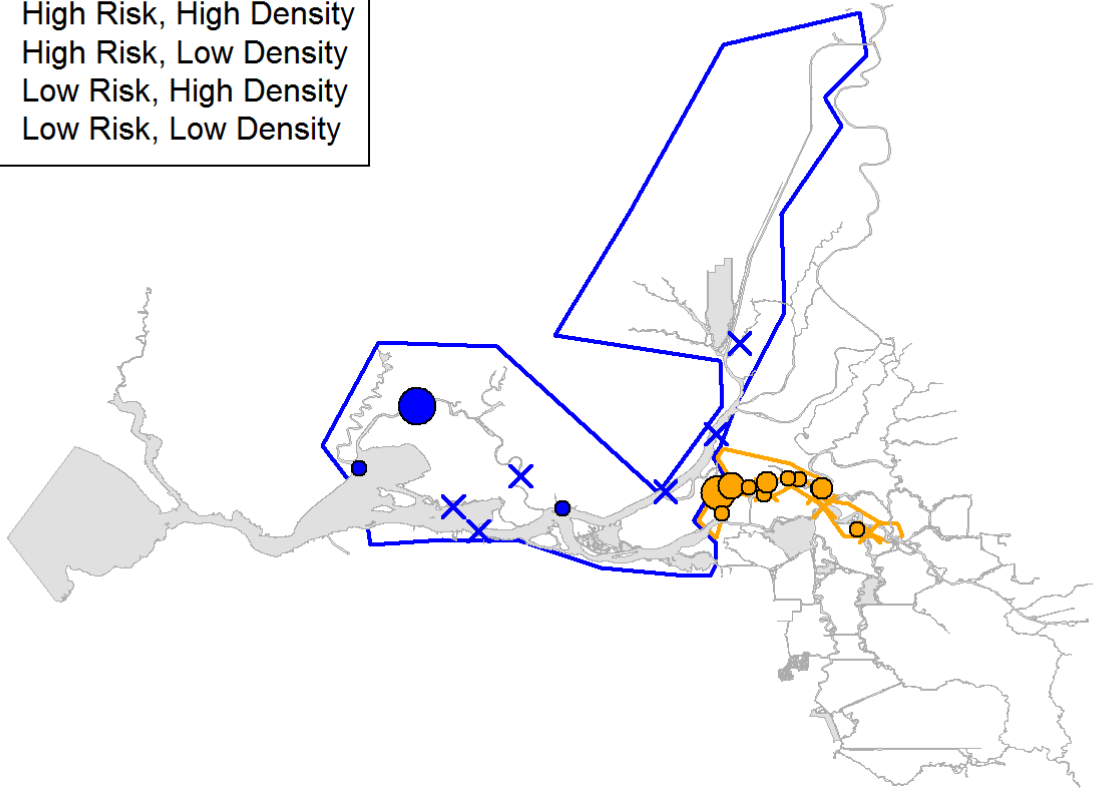
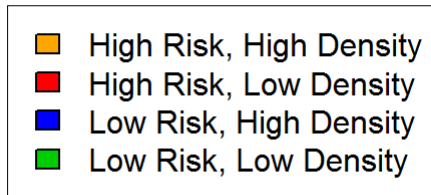
Week 2 DSM catches (X = no catch)

16 sites; 24 DSM total



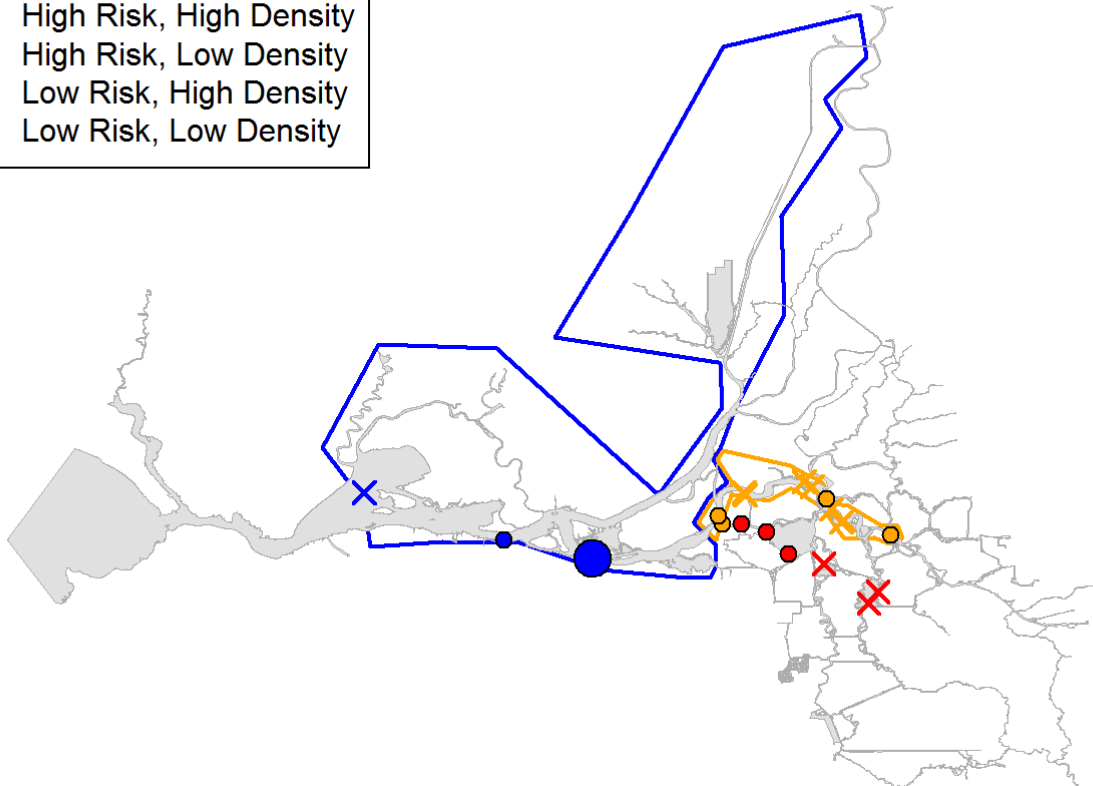
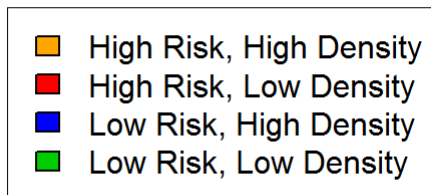
Week 3 DSM catches (X = no catch)

24 sites; 27 DSM total



Week 4 DSM catches (X = no catch)

20 sites; 13 DSM total



Sampling Locations Across All Weeks

